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ABSTRACT

Presented are data on audiological examinations collected by the Annual Survey of Hearing Impaired Children and Youth for over 35,000 students enrolled in special educational programs for the hearing impaired during the 1969-70 school year. Statistics reported include age, sex, and hearing threshold levels (better ear averages) of the students; the audiometric standard used in testing; place conducting audiological examination; profession of examiner; and recency of examination. (Author/KW)

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AUDIOLOGICAL EXAMINATIONS OF HEARING IMPAIRED STUDENTS

UNITED STATES, 1968-69

Office of Demographic Studies
Gallaudet College
Washington, D.C.

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DATA FROM THE
ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

AUDIOLOGICAL EXAMINATIONS OF HEARING IMPAIRED STUDENTS

UNITED STATES: 1969-70

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Better ear averages, audiometric standard used in testing, profession of examiner, place conducting audiological examination and recency of examination for approximately 35,000 students enrolled in participating special educational programs for the hearing impaired during the 1969-70 school year.

OFFICE OF DEMOGRAPHIC STUDIES
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Washington, D.C. November, 1971

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Patricia Voneiff, *Statistical Analyst*
Sally Wagner, *Administrative Assistant*

TABLE OF CONTENTS

PAGE

Acknowledgements iv

Introduction 1

Sources of the Data 2

Qualifications and Limitations of the Data 2

Discussion of the Data 3

Summary 10

Detailed Tables

Table 1: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels, According to Age and Sex: United States, 1969-70 School Year. 12

Table 2: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age and Hearing Threshold Levels, According to Profession of Examiner: United States, 1969-70 School Year. 15

Table 3: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Profession of Examiner, According to Place of Examination: United States, 1969-70 School Year. 16

Table 4: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age and Hearing Threshold Levels, According to Place of Examination: United States, 1969-70 School Year. 17

Table 5: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Recency of Audiological Examination, According to Profession of Examiner: United States, 1969-70 School Year. 18

Table 6: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Recency of Audiological Examination, According to Place of Examination: United States, 1969-70 School Year. 19

Appendices

Appendix I: Description of the Annual Survey of Hearing Impaired Children and Youth 22

Appendix II: Basic Data Form Used in the Annual Survey for the 1969-70 School Year 25

Appendix III: Preschool Data Form Used in the Annual Survey for the 1969-70 School Year 27

Appendix IV: Programs Participating in the Annual Survey of Hearing Impaired Children and Youth 29

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We wish to express our appreciation to those who have continued to support and guide the efforts of the Annual Survey of Hearing Impaired Children and Youth. Our special thanks must be directed to the personnel of the participating programs who work so diligently to supply the information to the Survey. The names of these programs appear in Appendix IV.

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Patricia Voneiff
Augustine Gentile
Washington, D. C.
November, 1971

ABSTRACT

This publication contains data on audiological examinations collected by the Annual Survey of Hearing Impaired Children and Youth for over 35,000 students enrolled in special educational programs for the hearing impaired during the 1969-70 school year. Given are statistics showing the age, sex and hearing threshold levels (better ear averages) of these students. Also reported are the audiometric standard used in testing, the place and profession of the person conducting the audiological examinations, and the recency of the examinations.

The data show that on students for whom these items were reported, about 50 percent had hearing threshold levels (better ear averages) of 85 decibels or higher, 84 percent were tested according to the ISO standard; 78 percent of the students were examined by either an audiologist or otologist; the examinations were conducted in a speech and hearing clinic or hospital and university for 46 percent of the students and in schools for the deaf for 34 percent of the students; 66 percent of the students had had an audiological examination within two years and 82 percent had had an examination within three years of the midpoint of the school year.

The Annual Survey of Hearing Impaired Children and Youth is conducted by the Office of Demographic Studies of Gallaudet College. The major portion of the funding for the project is provided by the Division of Research, Bureau of Education for the Handicapped, Department of Health, Education and Welfare.

Audiological Examinations of Hearing Impaired Students United States, 1969-70 School Year

Patricia Voneiff

INTRODUCTION

Reported in this publication are data on audiological examinations gathered by the Annual Survey of Hearing Impaired Children and Youth during the 1969-70 school year. These data are based on information obtained for over 35,000 hearing impaired students enrolled in special educational programs throughout the United States. Presented are statistics on the student's better ear average, audiometric standard used in testing, the place and profession of the person conducting the audiological examination and recency of the examination.

Although the audiological information contained in this report is presented in terms of better ear averages, the Survey Office collects data on the complete audiograms from which the averages were computed.[1] Thus, more detailed information can be made available to researchers for more intensive studies. A major policy of the Annual Survey program is to share the data it collects with researchers and other professionals interested in the hearing impaired population.

This publication is one of a series of reports that describe the characteristics of hearing impaired children enrolled in special educational programs. A list of previous publications appears on the inside back cover. A continuing program which began operation in May, 1968, the Annual Survey is committed to the collection and dissemination of information related to hearing impaired children and youth. The Survey, conducted by the Office of Demographic Studies of Gallaudet College, receives a major portion of its funding from the Division of Research, Bureau of Education for the Handicapped, Department of Health, Education, and Welfare. The balance of its funding is provided by Gallaudet College. Further details concerning the scope of activities and policies of the Annual Survey may be found in Appendix I.

[1] See Basic Data Form, Section V, Appendix II.

SOURCES OF THE DATA

During the 1969-70 school year, all special educational programs serving the hearing impaired known to the Survey were invited to participate in the program. Of the 570 programs contacted, approximately 76 percent agreed to participate in the Survey for the 1969-70 school year. The enrollment of the participating programs (35,285) represented 80 percent of the estimated student enrollment of all programs contacted. Appendix IV contains a list of the educational programs that provided data for the 1969-70 school year.

Three survey forms were used to collect data during the 1969-70 school year. The two basic survey forms, one for children six years of age and over and one for children under six, are shown in Appendices II and III. The third form, an abbreviated version of the Basic Data Form (ACHIC-2), was used for students reported to the Survey during the 1968-69 school year. This form determined if the student was still enrolled in the program and allowed for updating the previous year's data. Any information obtained the previous year was not requested again.

All items on the Survey forms were selected on the basis of recommendations made by the National Advisory Committee to the Annual Survey.

QUALIFICATIONS AND LIMITATIONS OF THE DATA

In order to accurately use and interpret these data, one should note carefully the qualifications and limitations of the data presented in this report.

An important factor to consider in interpreting any statistical data is the level of participation and the rate of non-reporting for particular variables. Records were obtained on approximately 80 percent of the students attending special educational programs for the hearing impaired known to the Survey. While it is believed that the data are representative for each of the major types of programs (residential schools, day schools and full-time special classes, and part-time programs such as itinerant services), the proportion of students included in the data of the Annual Survey is not equivalent for each type of program. The proportion ranges from approximately 85 percent of all students in residential schools to an estimated one-third of the students receiving part-time services.

Table A shows the rate of non-reporting for the particular variables presented in this report. In all cases, the non-reporting seemed to be random and did not focus on any particular age or hearing threshold level group. In the few cases where the sex and age of a student were not submitted, these were determined through the use of other information contained on the form. Where this was not possible, direct correspondence with the reporting source took place. More specific comments about non-reporting rates for each variable are made in the discussion of the data which follows.

Also noted are the methods used to summarize, classify and code data. These comments also should be carefully reviewed.

The quality of data obtained in surveys is, of course, another important factor to consider in interpreting survey results. Although the Survey has not validated the reported audiological information by independent means, it is believed that these data are valid for general statistical purposes. This belief is based on the fact that for those reporting the information, almost 80 percent of the examinations were conducted by an audiologist or otologist, and that over 65 percent of the examinations were conducted within a 24 month period of the midpoint of the survey year (December, 1969).

TABLE A: Percentage of records for which data for selected items were not reported or were not usable: United States, 1969-70 school year

Item	Percent of Records for Which Data Were Not Reported or Were Not Usable
Sex[1]	0.0
Age[1]	0.0
Better ear average[2]	25.3
Standard used for testing	20.5
Place of examination	10.4
Profession of examiner	15.4
Recency of audiological examination	14.4

[1] Data for these items were edited.

[2] Only 5 percent of the records did not report some audiological results.

DISCUSSION OF THE DATA

Tables 1-6 which follow in a later section present detailed data on the audiological examinations of 35,285 students attending special educational programs for the hearing impaired. Some highlights, summary tables and additional qualifying aspects of these data are discussed here.

Hearing Threshold Levels

Hearing threshold levels are presented here in terms of better ear averages which were determined by averaging the puretone thresholds for 500, 1000 and 2000 cycles per second in the better ear. Approximately 67 percent of the audiometric results were reported according to the ISO[1] standard, while only 13 percent were reported according to the ASA[2] standard. For the purposes of this report, better ear averages based on the ASA standard were converted to the ISO standard by increasing the ASA average 10 decibels. Where the standard was not reported (20.5 percent), the better ear averages for these students have been treated as though obtained according to the ISO standard. (See Table B.) It should be noted that a better ear average could not be obtained on 8,930 (25.3 percent) of the students; however, only 5 percent of the forms contained no audiological results. The remaining 20 percent contained information but did not give results for one or more of the frequencies used to determine the better ear average.

[1]International Organization for Standardization

[2]American Standard Association

TABLE B: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by audiometric standard used in testing: United States, 1969-70 school year

Standard Used in Testing	Number of Students	Percent
All Standards	35,285	100.0
ISO	23,457	66.5
ASA	4,587	13.0
Standard not reported	7,241	20.5

In the tables which follow, students for whom audiological data were submitted but for whom a better ear average could not be determined, will be classified under the category "Unable to Compute." Students for whom no audiological data were given are referred to as "Data Not Reported." In some tables this category is included with those in "Unable to Compute." In these instances, the combination of these two categories is referred to as "Data Not Available."

The data in detailed Table 1, indicate no significant difference between the hearing loss of males versus that of females. For each of the sexes, the largest number of students reported to the Survey

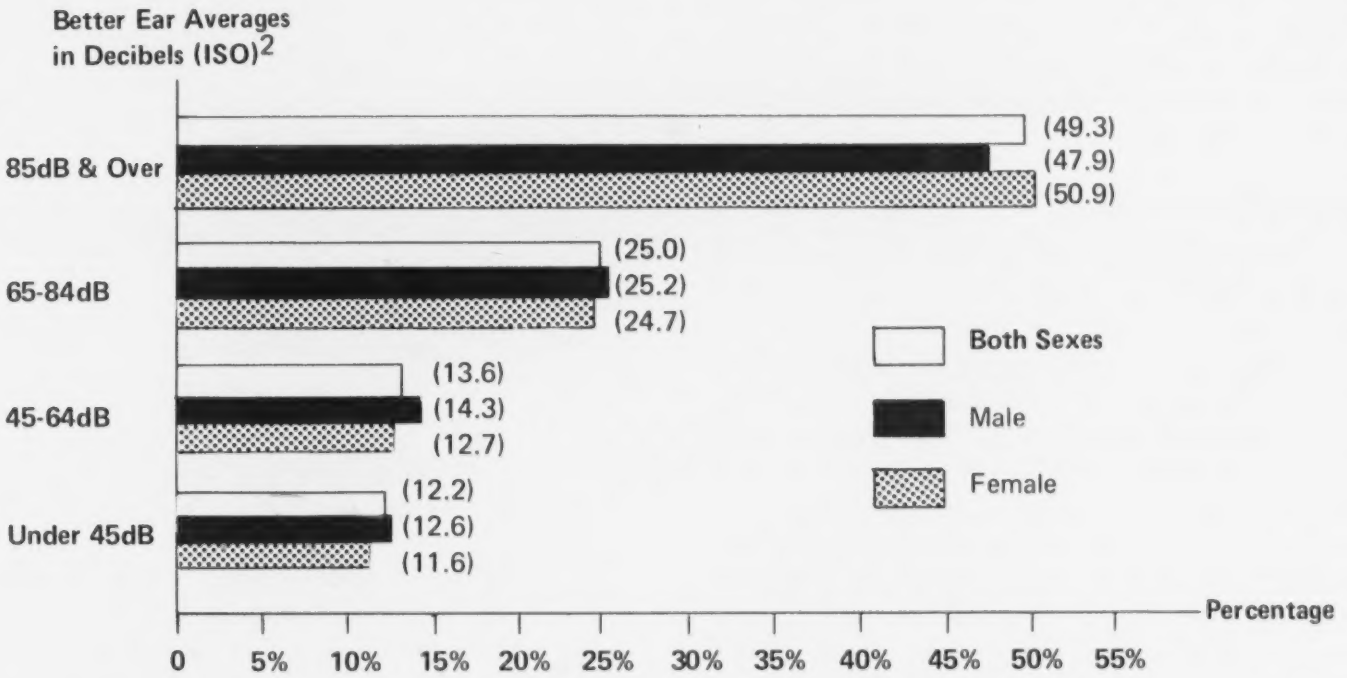
TABLE C: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by sex, according to hearing threshold levels: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO)[1]	Both Sexes		Males		Females	
	Number of Students[2]	Percent	Number of Students[2]	Percent	Number of Students[2]	Percent
All Hearing Levels	26,355	100.0	14,343	100.0	12,012	100.0
Under 45dB	3,205	12.2	1,807	12.6	1,398	11.6
45 - 64dB	3,583	13.6	2,052	14.3	1,531	12.7
65 - 84dB	6,587	25.0	3,615	25.2	2,972	24.7
85dB & above	12,980	49.3	6,869	47.9	6,111	50.9

[1]Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

[2]Excludes those students for whom a better ear average was not reported or could not be computed.

CHART 1: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by hearing threshold levels,[1] according to sex: United States, 1969-70 school year



[1]Excludes those students for whom a better ear average was not reported or could not be computed.

[2]Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

tended to fall in the more severe hearing loss categories. For example, Table C shows that approximately 50 percent of the students for whom this information was reported had better ear averages of 85 dB or higher, while almost 75 percent had a loss of 65 dB and above. (Also see Chart 1.)

Also shown in Table 1 are better ear averages according to the age of the students. These data indicate that the percentage of students with a better ear average of 85 dB or greater increases with age for students six years of age and over. (See Table D.) This table also shows that data were not available for a much higher proportion of the children under six compared to children age six and over.

TABLE D: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by age, according to hearing threshold levels: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO)[1]	Age						
	Total Students	Under 3 Years	3-5 Years	6-9 Years	10-13 Years	14-17 Years	18 Years and Over
All Hearing Levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 45dB	9.1	1.5	2.0	12.2	11.3	9.8	4.2
45 - 64 dB	10.1	5.9	6.3	11.6	11.4	10.2	9.5
65-84dB	18.7	11.3	17.7	17.3	19.9	19.4	19.0
85dB & above	36.8	18.7	32.3	34.9	36.7	40.5	47.0
Data not available	25.3	62.5	41.6	23.9	20.8	20.1	20.3

[1]Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

Profession of Examiner

The profession of the examiner testing the student was asked for all students reported to the Survey. This information was submitted on all but 5,453 or 15.4 percent of the students. Check boxes were supplied in answering this question for "audiologist," "otologist," "other M.D.," "audiometrist," "nurse" and "teacher." Where none of the above applied, a space to write in the profession of the examiner was available.

The profession of the person conducting the audiological examination was reported for 29,832 students. Of these, 22,191 or approximately 75 percent were tested by audiologists. The other most frequently reported professions were otologist, audiometrist, nurse and teacher. None of these, however, exceeded 5 percent of the records for which this item was reported. (See Table E.)

Table 2 shows the profession of the examiner that conducted the audiological examination by age and hearing threshold level of the students. Table F indicates that students reported to the Survey with losses of 45 dB or greater in the better ear were tested by audiologists or otologists in about 80 percent of the cases. However, for students with less than a 45 dB loss in the better ear, only about 57 percent were tested by audiologists or otologists, while approximately 30 percent were tested by school nurses.

TABLE E: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by profession of examiner: United States, 1969-70 school year

Profession of Examiner	Number of Students[1]	Percent
All Examiners	29,832	100.0
Audiologist	22,191	74.4
Otologist	1,031	3.5
Audiometrist	1,427	4.8
Nurse	1,351	4.5
Teacher	1,326	4.4
Other	2,506	8.4

[1]Excludes 5,453 students for whom the profession of the examiner was not reported.

Table G summarizes by age the data in detailed Table 2. It excludes students for whom the profession of the person who conducted the audiological examination was not reported. These data show that an audiologist or otologist was reported as conducting

TABLE F: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to profession of examiner: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO)[1]	Profession of Examiner						
	All Examiners[2]	Audiologist	Otologist	Audiometrist	Nurse	Teacher	Other
All Hearing Levels	100.0	74.4	3.5	4.8	4.5	4.4	8.4
Under 45dB	100.0	50.5	6.2	1.9	29.2	1.9	10.3
45 - 64dB	100.0	74.3	4.3	5.2	4.5	3.3	8.4
65 - 84dB	100.0	76.5	3.1	5.8	1.8	5.2	7.6
85dB & above	100.0	79.9	2.1	4.8	1.2	5.5	6.5
Data not available	100.0	73.1	4.7	4.8	2.0	3.6	11.9

[1]Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

[2]Excludes 5,453 students for whom the profession of the examiner was not reported.

TABLE G: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by age, according to profession of examiner: United States, 1969-70 school year

Age	Profession of Examiner									
	All Examiners[1]	Audiologist	Otologist	Other M.D.	Audiometrist	Nurse	Teacher	School Principal	Speech Therapist	Other
All Ages	100.0	74.4	3.5	1.1	4.8	4.5	4.4	.5	2.3	4.4
Under 3 years	100.0	96.5	1.4	–	–	–	1.0	–	.7	.3
3-5 years	100.0	89.3	2.9	.8	3.0	.6	1.3	*	.3	1.7
6-9 years	100.0	74.7	3.8	1.2	5.0	5.8	3.7	.4	1.4	4.0
10-13 years	100.0	70.6	3.7	1.3	4.9	5.6	5.4	.5	2.9	5.1
14-17 years	100.0	68.6	3.4	1.0	5.4	5.2	6.1	.9	3.8	5.7
18 years & over	100.0	69.5	2.9	1.3	6.6	3.4	5.2	1.0	3.8	6.3

*Less than .05 percent.

[1]Excludes 5,453 students for whom the profession of the examiner was not reported.

TABLE H: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by profession of examiner, according to place of examination: United States, 1969-70 school year

Profession of Examiner	Place of Examination										
	All Places	Speech & Hearing Clinic	Hospital or University	Health Department	Audiologist's Office	School for Deaf	Other School	Hearing Aid Co.	M.D.'s Private Office	Other	Data Not Reported
All Examiners[1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Audiologist	74.4	89.7	79.2	49.8	99.4	74.3	33.5	30.8	27.7	70.6	67.6
Otologist	3.5	2.5	4.6	2.7	.3	2.4	1.1	–	45.1	13.3	1.9
Other M.D.	1.1	.8	2.2	.4	–	.2	.3	–	24.3	3.4	2.0
Audiometrist	4.8	1.5	1.0	30.1	–	6.2	7.0	36.5	.7	2.1	6.9
Nurse	4.5	.3	.1	4.2	–	.6	32.7	9.6	1.0	2.4	10.9
Teacher	4.4	.7	.3	–	–	8.8	9.4	–	–	1.6	5.0
School Principal	.5	*	–	–	–	.3	3.2	–	–	–	.2
Speech Therapist	2.3	2.8	.1	4.1	.3	.1	7.2	–	.6	2.6	4.1
Other	4.4	1.7	12.4	8.7	–	7.1	5.6	23.1	.7	4.0	1.5

*Less than .05 percent.

[1]Excludes 5,453 students for whom the profession of the examiner was not reported.

the examination proportionally more frequently for the younger students. For students under 3 years of age, an audiologist or otologist conducted the examination for almost 98 percent of the students; for students from 3-5 years of age this proportion was about 92 percent; for students 6-9 years of age it was about 79 percent; for students 10-13 years it was 74 percent; and for students 14 years of age and over it was about 72 percent.

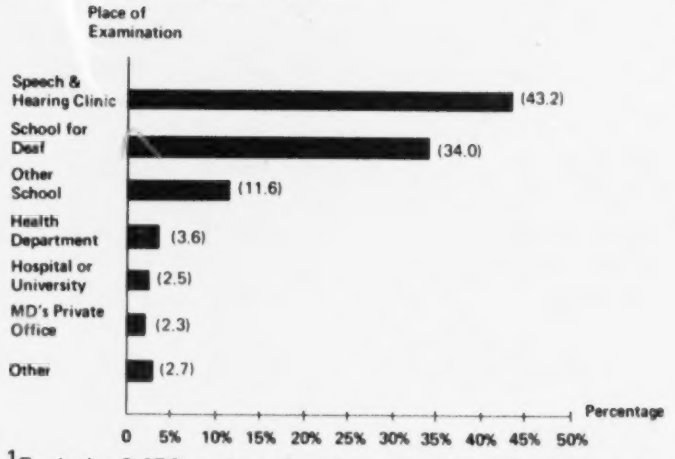
Detailed Table 3 shows the profession of the examiner according to the type of place in which the student was tested. A percentage distribution for this table is shown in text Table H. It may be seen that an audiologist or an otologist was testing most of the students reported as being seen in speech and hearing clinics, hospitals or universities, schools for the deaf and in audiologists' or M.D.s' private offices. Although members of these professions tested a large percentage of the students who obtained examinations in health departments, other schools and hearing aid companies, this percentage was proportionately lower than for the previously mentioned places.

Place of Examination

Three types of facilities were reported as conducting the audiological examinations for the majority of the students. These were speech and hearing clinics, schools for the deaf and other schools.[1] Additional types of facilities reported as the place of examination were hospitals or universities,

[1]Where a speech and hearing clinic was located at a school for the deaf or hospital, the place of examination was coded as a speech and hearing clinic.

CHART 2: Percentage distribution[1] of students enrolled in participating special educational programs for the hearing impaired by place of examination: United States, 1969-70 school year



[1]Excludes 3,672 students for whom the place of examination was not reported.

health departments, audiologists' and M.D.s' private offices, and hearing aid companies. This information was not reported for 3,672 or 10.4 percent of the students. If those for whom this information was not reported are excluded, the number and percentage distribution would be as follows. Chart 2 also depicts this distribution.

	Number	*Percent*
Speech and Hearing Clinic	13,655	43.2
School for the Deaf	10,753	34.0
Other School	3,682	11.6
Health Department	1,151	3.6
Hospital or University	801	2.5
M.D.'s Private Office	719	2.3
Other	852	2.7

TABLE I: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by hearing threshold levels, according to place of examination: United States, 1969-70 school year

Better Ear Averages in Decibels (ISO)[1]	Place of Examination							
	All Places[2]	Speech & Hearing Clinic	Hospital or University	Health Depart-ment	School for Deaf	Other School	M.D.'s Private Office	Other
All Hearing Levels	100.0	43.2	2.5	3.6	34.0	11.6	2.3	2.7
Under 45dB	100.0	40.9	3.2	4.3	4.6	36.9	6.8	3.2
45 - 64dB	100.0	54.2	4.2	4.4	16.5	14.1	2.3	4.1
65 - 84dB	100.0	46.0	2.6	3.8	33.2	9.7	1.8	2.9
85dB & above	100.0	37.3	1.5	2.9	48.0	7.3	.8	2.0
Data not availalbe	100.0	46.8	3.1	4.1	31.1	8.8	3.3	2.8

[1]Average hearing threshold in better ear computed at 500, 1000, 2000 cycles per second.

[2]Excludes 3,672 students for whom the place of examination was not reported.

TABLE J: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by age, according to place of examination: United States, 1969-70 school year

Age	Place of Examination							
	All Places[1]	Speech & Hearing Clinic	Hospital or University	Health Depart-ment	School for Deaf	Other School	M.D.'s Private Office	Other
All Ages	100.0	43.2	2.5	3.6	34.0	11.6	2.3	2.7
Under 3 years	100.0	79.3	6.3	–	5.0	6.3	2.0	1.0
3-5 years	100.0	65.0	4.5	2.4	16.7	5.9	2.0	3.5
6-9 years	100.0	47.4	2.3	4.8	26.5	13.3	2.7	3.0
10-13 years	100.0	38.0	2.1	4.2	36.5	14.0	2.2	2.9
14-17 years	100.0	32.0	2.1	3.2	47.2	11.6	2.3	1.7
18 years & over	100.0	27.5	1.5	2.3	55.1	9.9	1.5	2.3

[1]Excludes 3,672 students for whom the place of examination was not reported.

The places in which the audiological examinations were conducted according to the age and hearing threshold levels of the students are shown in Table 4. When better ear averages are shown in relation to the place conducting the audiological examination, it was found that the majority of students with losses of 45 dB or less in the better ear were tested in clinics and other schools. (See Table I.) As the severity of the loss increases, however, the majority of students were reported as being tested in clinics and schools for the deaf. This probably suggests the location of the more severely hard-of-hearing student in a school for deaf as opposed to a regular school providing special educational programs.

Table J summarizes the data presented in detailed Table 4 by age. For those students under 3 years of age, 79.3 percent were reported as being given their audiological examinations at speech and hearing clinics. In the 3-5 year category, 65 percent were tested in clinics. For students six years of age and over, however, the percentage of students tested at a clinic decreases and there is an increase in those reported as being tested in schools for the deaf and other schools.

Recency of Audiological Examination

Tables 5 and 6 show the recency of the audiological examination according to the profession

TABLE K: Number and percentage distribution of students enrolled in participating special educational programs for the hearing impaired by recency of audiological examination: United States, 1969-70 school year

Recency of Audiological Examination	Number of Students[1]	Percent
Total	30,185	100.0
Under 1 year	10,447	34.6
1 year, less than 2 years	9,535	31.6
2 years, less than 3 years	4,878	16.2
3 years, less than 4 years	2,433	8.1
4 years, less than 5 years	1,287	4.3
5 years, less than 6 years	614	2.0
6 years & over	991	3.3

[1]Excludes 5,100 students for whom recency of examination was not reported.

and place of the person conducting the examination. Recency of examination refers to the difference in time between the date of the audiological examination and December 31, 1969. For example, the recency of an examination given in October, 1968, is one year–3 months, and is counted in the "one year, less than two years" category.

As previously stated, this item was not reported for 5,100 students. If these students are excluded, the number and percentage distribution would be as indicated in Table K. Chart 3 also depicts this distribution.

As seen in this table, over 10,000 students (35 percent) had been tested within one year of December 31, 1969. Another 9,535 students (32 percent) were tested the previous year.

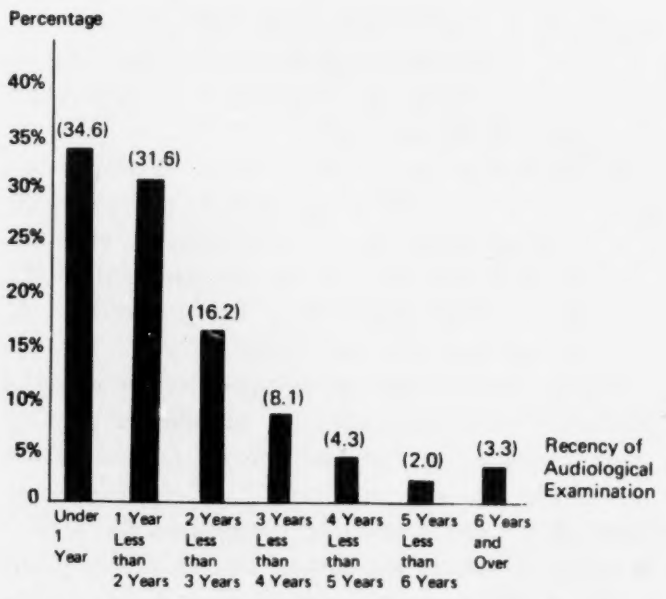
Tables L and M summarize the data presented in detailed Tables 5 and 6 respectively. These tables show that in any given year, a very high proportion of the students reported to the Survey had been tested by an audiologist or otologist. Furthermore, these data indicate that the largest percentage of the audiological examinations were consistently found to be conducted in either a speech and hearing clinic or a school for the deaf.

TABLE L: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by recency of audiological examination, according to profession of examiner: United States, 1969-70 school year

Recency of Audiological Examination	Profession of Examiner		
	All Examiners[1]	Audiologist and Otologist	All Other Examiners
Total	100.0	77.8	22.2
Under 1 year	100.0	75.9	24.1
1 year, less than 2 years	100.0	79.2	20.8
2 years, less than 3 years	100.0	79.1	20.9
3 years & over	100.0	79.7	20.3

[1]Excludes those students for whom the profession of the examiner was not reported.

CHART 3: Percentage distribution[1] of students enrolled in participating special educational programs for the hearing impaired according to the recency of audiological examination: United States, 1969-70 school year



[1]Excludes 5,100 students for whom recency of the examination was not reported.

TABLE M: Percentage distribution of students enrolled in participating special educational programs for the hearing impaired by recency of audiological examination, according to place of examination: United States, 1969-70 school year

Recency of Audiological Examination	Place of Examination				
	All Places[1]	Speech and Hearing Clinic	School for Deaf	Other School	All Other Places
Total	100.0	43.2	34.0	11.6	11.1
Under 1 year	100.0	45.5	25.2	17.2	12.1
1 year, less than 2 years	100.0	39.9	39.1	10.9	10.1
2 years, less than 3 years	100.0	42.4	39.2	6.9	11.6
3 years & over	100.0	47.7	35.0	6.9	10.3

[1]Excludes students for whom the place of examination was not reported.

SUMMARY

Data relative to the audiological examinations of 35,285 students reported to the Annual Survey for the 1969-70 school year have been presented. Specifically, this report focused on better ear averages, audiometric standard used in testing, place and profession of the person conducting the audiological examination and the recency of examination.

The methodology used to collect the data as well as its qualifications and highlights have been discussed. With respect to the major variables presented in this report, the results are as follows:

1. The largest percentage of students reported to the Survey fell into the more severe hearing loss categories. (i.e. For those students for whom a better ear average could be computed, almost 50 percent had a hearing loss of 85 dB or greater.) Also, this percentage gradually increased among the older age groups.
2. Of the students on whom the information was reported, almost 78 percent were tested by an audiologist or an otologist.
3. Speech and hearing clinics and schools for the deaf were reported as the place of examination for 77 percent of the students for whom this information was reported.
4. Excluding the 5,100 students on whom this item was not reported, almost 35 percent of the students had been given audiological examinations within one year of the midpoint of the school year (December, 1969). Another 32 percent had been tested within 2 years.

Studies toward the development of audiological profiles or the relationship of audiological data to other significant variables such as age at onset, cause of hearing loss and additional handicapping conditions all present interesting possibilities for further research. Although the Annual Survey will be doing some of these studies, the assistance of outside researchers is needed and encouraged.

LIST OF DETAILED TABLES

TABLE 1: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Hearing Threshold Levels, According to Age and Sex: United States, 1969-70 School Year.

TABLE 2: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age and Hearing Threshold Levels, According to Profession of Examiner: United States, 1969-70 School Year.

TABLE 3: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Profession of Examiner, According to Place of Examination: United States, 1969-70 School Year.

TABLE 4: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Age and Hearing Threshold Levels, According to Place of Examination: United States, 1969-70 School Year.

TABLE 5: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Recency of Audiological Examination, According to Profession of Examiner: United States, 1969-70 School Year.

TABLE 6: Number of Students Enrolled in Participating Special Educational Programs for the Hearing Impaired by Recency of Audiological Examination, According to Place of Examination: United States, 1969-70 School Year.

TABLE 1: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS, ACCORDING TO AGE AND SEX: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO)[1]	Both Sexes																			
	Total Number of Students	Under 3 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years	19 Years	20 Years and Over
All Hearing Levels	35,285	336	699	1,865	3,478	1,766	2,020	2,076	2,462	2,946	3,309	2,362	2,264	2,115	1,936	1,836	1,708	1,168	586	353
Under 15	518	--	2	1	8	12	47	46	43	66	45	45	55	43	38	28	26	6	6	1
15-24	533	--	5	3	12	23	37	59	51	58	63	51	41	43	31	20	23	9	2	2
25-29	551	1	--	--	12	28	40	45	62	62	43	57	47	48	30	29	29	9	5	4
30-34	506	1	2	2	12	20	41	60	43	62	63	41	42	32	28	27	16	9	5	--
35-39	540	2	7	4	14	27	50	41	56	51	51	50	48	39	28	28	28	9	4	3
40-44	557	1	7	11	21	45	36	49	56	44	53	48	41	43	34	32	22	8	2	4
45-49	666	3	3	17	33	36	48	58	59	60	73	56	52	46	33	24	28	25	9	3
50-54	823	8	10	28	57	43	53	57	65	80	90	73	42	48	46	53	37	20	10	3
55-59	929	2	12	35	58	66	49	49	87	85	97	53	73	60	58	44	45	33	13	10
60-64	1,165	7	13	40	76	65	74	70	88	109	121	87	88	65	66	64	57	46	19	10
65-69	1,394	8	21	45	126	73	74	85	100	131	144	103	85	83	64	91	78	49	20	14
70-74	1,616	11	23	80	151	79	83	93	98	139	186	93	108	93	88	95	87	64	28	17
75-79	1,759	12	29	104	173	85	90	86	127	147	188	110	117	99	101	98	90	63	19	21
80-84	1,818	7	36	94	185	88	89	94	98	182	188	133	109	119	104	101	85	54	27	25
85-89	1,907	9	36	87	213	73	81	95	123	167	190	133	123	125	111	109	93	81	40	18
90-94	2,225	17	46	82	203	104	125	138	133	178	204	174	134	157	106	147	128	76	50	23
95-98	2,285	8	31	93	202	82	113	112	168	190	208	151	135	147	155	167	128	102	58	35
99 and Above	6,563	29	69	271	621	299	369	393	501	512	608	456	428	399	391	360	350	277	158	72
Unable to Compute	7,187	163	277	685	1,055	429	411	355	397	492	551	366	414	344	346	243	293	205	93	68
Data Not Reported	1,743	47	70	183	246	89	110	91	107	131	143	82	82	82	78	76	65	23	18	20

[1]Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

TABLE 1 (continued): NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS, ACCORDING TO AGE AND SEX: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO)[1]	Males																			
	Total Number of Students	Under 3 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years	19 Years	20 Years and Over
All Hearing Levels	19,082	174	370	951	1,787	966	1,063	1,140	1,349	1,608	1,776	1,322	1,216	1,151	1,090	997	921	650	332	219
Under 15	292	--	1	1	7	7	25	25	21	39	25	26	32	19	21	13	22	4	4	--
15-24	318	--	3	3	7	12	26	34	35	34	35	31	19	23	21	15	11	5	2	2
25-29	308	--	--	--	6	18	21	26	38	36	23	35	29	23	17	14	10	6	4	2
30-34	272	1	1	1	10	12	21	35	18	35	36	21	25	16	18	11	6	3	2	--
35-39	297	2	3	1	6	15	32	23	32	28	26	31	23	20	17	16	12	5	3	2
40-44	320	--	6	5	11	34	18	31	33	26	29	22	24	26	14	18	15	4	1	3
45-49	401	2	1	7	22	18	22	39	35	37	39	30	26	33	24	20	18	21	5	2
50-54	460	4	5	17	27	23	31	32	36	39	53	42	20	30	27	26	25	14	7	2
55-59	544	2	8	22	33	31	30	22	52	51	60	29	46	38	38	23	26	18	11	4
60-64	647	4	7	17	38	37	35	35	59	64	64	55	52	32	41	28	32	27	15	5
65-69	766	3	14	18	62	42	43	46	55	73	75	61	50	50	32	54	39	32	10	7
70-74	914	6	12	55	75	46	34	52	57	82	104	59	66	52	58	57	37	36	12	14
75-79	964	4	13	54	92	43	54	39	72	82	103	62	66	57	59	55	45	37	13	14
80-84	971	5	18	46	90	47	48	49	48	96	109	70	61	70	56	56	42	27	16	17
85-89	1,042	7	20	35	97	44	48	58	72	90	98	75	61	78	68	66	56	38	19	12
90-94	1,201	12	28	42	104	50	58	91	67	99	109	101	71	80	52	83	74	43	24	13
95-98	1,210	2	17	41	111	42	59	55	87	110	117	87	73	69	90	84	57	57	29	23
99 and Above	3,416	20	41	136	327	165	196	206	241	264	316	249	214	199	209	174	186	146	86	41
Unable to Compute	3,784	77	138	348	528	228	209	190	228	257	278	188	215	190	180	142	173	114	59	42
Data Not Reported	955	23	34	102	134	52	53	52	63	66	77	48	43	46	48	42	35	13	10	14

[1]Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

TABLE 1 (continued): NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY HEARING THRESHOLD LEVELS, ACCORDING TO AGE AND SEX: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO)[1]	Females																			
	Total Number of Students	Under 3 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	9 Years	10 Years	11 Years	12 Years	13 Years	14 Years	15 Years	16 Years	17 Years	18 Years	19 Years	20 Years and Over
All Hearing Levels	16,203	162	329	914	1,691	800	957	936	1,113	1,338	1,533	1,040	1,048	964	846	839	787	518	254	134
Under 15	226	--	1	--	1	5	22	21	22	27	20	19	23	24	17	15	4	2	2	1
15-24	215	--	2	--	5	11	11	25	16	24	28	20	22	20	10	5	12	4	--	--
25-29	243	1	--	--	6	10	19	19	24	26	20	22	18	25	13	15	19	3	1	2
30-34	234	--	1	1	2	8	20	25	25	27	27	20	17	16	10	16	10	6	3	--
35-39	243	--	4	3	8	12	18	18	24	23	25	19	25	19	11	12	16	4	1	1
40-44	237	1	1	6	10	11	18	18	23	18	24	26	17	17	20	14	7	4	1	1
45-49	265	1	2	10	11	18	26	19	24	23	34	26	26	13	9	4	10	4	4	1
50-54	363	4	5	11	30	20	22	25	29	41	37	31	22	18	19	27	12	6	3	1
55-59	385	--	4	13	25	35	19	27	35	34	37	24	27	22	20	21	19	15	2	6
60-64	518	3	6	23	38	28	39	35	29	45	57	32	36	33	25	36	25	19	4	5
65-69	628	5	7	27	64	31	31	39	45	58	69	42	35	33	32	37	39	17	10	7
70-74	702	5	11	25	76	33	49	41	41	57	82	34	42	41	30	38	50	28	16	3
75-79	795	8	16	50	81	42	36	47	55	65	85	48	51	42	42	43	45	26	6	7
80-84	847	2	18	48	95	41	41	45	50	86	79	63	48	49	48	45	43	27	11	8
85-89	865	2	16	52	116	29	33	37	51	77	92	58	62	47	43	43	37	43	21	6
90-94	1,024	5	18	40	99	54	67	47	66	79	95	73	63	77	54	64	54	33	26	10
95-98	1,075	6	14	52	91	40	54	57	81	80	91	64	62	78	65	83	71	45	29	12
99 and Above	3,147	9	28	135	294	134	173	187	260	248	292	207	214	200	182	186	164	131	72	31
Unable to Compute	3,403	86	139	337	527	201	202	165	169	235	273	178	199	154	166	101	120	91	34	26
Data Not Reported	788	24	36	81	112	37	57	39	44	65	66	34	39	36	30	34	30	10	8	6

[1]Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

TABLE 2: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE AND HEARING THRESHOLD LEVELS, ACCORDING TO PROFESSION OF EXAMINER: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO)[1] and Age	Profession of Examiner										
	All Examiners	Audiol-ogist	Otolo-gist	Other M.D.	Audiom-etrist	Nurse	Teacher	School Prin-cipal	Speech Thera-pist	Other	Data Not Reported
All Ages-All Hearings Levels	35,285	22,191	1,031	334	1,427	1,351	1,326	145	700	1,327	5,453
Under 45	3,205	1,457	178	67	56	841	54	1	156	73	322
45-64	3,583	2,398	138	42	168	146	107	21	73	135	355
65-84	6,587	4,485	181	37	342	105	304	49	126	234	724
85 and Above	12,980	9,369	246	39	567	138	642	56	199	468	1,256
Data Not Available	8,930	4,482	288	149	294	121	219	18	146	417	2,796
Under 3 Years-All Hearing Levels	336	278	4	--	--	--	3	--	2	1	48
Under 45	5	5	--	--	--	--	--	--	--	--	--
45-64	20	20	--	--	--	--	--	--	--	--	--
65-84	38	35	--	--	--	--	2	--	--	--	1
85 and Above	63	60	1	--	--	--	1	--	--	--	1
Data Not Available	210	158	3	--	--	--	--	--	2	1	46
3-5 Years-All Hearing Levels	6,042	4,396	143	41	147	30	65	2	17	82	1,119
Under 45	123	93	3	--	1	12	1	--	3	1	9
45-64	382	314	11	9	6	3	4	--	1	4	30
65-84	1,067	882	22	6	29	2	15	--	2	17	92
85 and Above	1,954	1,634	40	6	75	1	25	1	1	26	145
Data Not Available	2,516	1,473	67	20	36	12	20	1	10	34	843
6-9 Years-All Hearing Levels	8,324	5,225	267	85	351	405	260	25	99	282	1,325
Under 45	1,017	451	56	26	20	292	17	1	49	20	85
45-64	967	680	38	10	41	33	25	2	15	34	89
65-84	1,442	1,011	42	14	74	14	45	6	9	51	176
85 and Above	2,909	2,140	60	9	143	31	120	11	14	100	281
Data Not Available	1,989	943	71	26	73	35	53	5	12	77	694
10-13 Years-All Hearing Levels	10,881	6,514	339	118	454	514	502	43	266	475	1,656
Under 45	1,227	539	77	31	20	315	19	--	65	39	122
45-64	1,239	798	56	17	54	63	34	6	29	54	128
65-84	2,163	1,397	54	11	127	44	123	21	48	78	260
85 and Above	3,991	2,729	75	9	159	59	258	15	85	167	435
Data Not Available	2,261	1,051	77	50	94	33	68	1	39	137	711
14-17 Years-All Hearing Levels	7,595	4,498	224	66	353	339	401		246	371	1,040
Under 45	745	333	37	8	10	195	15	--	36	13	98
45-64	774	470	26	5	52	37	37	8	24	33	82
65-84	1,476	913	53	4	79	37	100	17	51	69	153
85 and Above	3,073	2,112	54	7	138	40	188	21	77	131	305
Data Not Available	1,527	670	54	42	74	30	61	11	58	125	402
18 Years & Over–All Hearing Levels	2,107	1,280	54	24	122	63	95	18	70	116	265
Under 45	88	36	5	2	5	27	2	--	3	--	8
45-64	201	116	7	1	15	10	7	5	4	10	26
65-84	401	247	10	2	33	8	19	5	16	19	42
85 and Above	990	694	16	8	52	7	50	8	22	44	89
Data Not Available	427	187	16	11	17	11	17	--	25	43	100

[1] Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

TABLE 3: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY PROFESSION OF EXAMINER, ACCORDING TO PLACE OF EXAMINATION: UNITED STATES, 1969-70 SCHOOL YEAR.

Profession of Examiner	Place of Examination										
	All Places	Speech & Hearing Clinic	Hospital or University	Health Department	Audiologist's Office	School for Deaf	Other School	Hearing Aid Company	M.D.'s Private Office	Other	Data Not Reported
All Examiners	35,285	13,655	801	1,151	350	10,753	3,682	72	719	430	3,672
Audiologist	22,191	11,355	569	482	342	7,438	1,168	16	190	266	365
Otologist	1,031	319	33	26	1	245	37	--	310	50	10
Other M.D.	334	96	16	4	--	16	11	--	167	13	11
Audiometrist	1,427	195	7	291	--	622	243	19	5	8	37
Nurse	1,351	32	1	41	--	57	1,140	5	7	9	59
Teacher	1,326	85	2	--	--	878	328	--	--	6	27
School Principal	145	1	--	--	--	32	111	--	--	--	1
Speech Therapist	700	358	1	40	1	14	250	--	4	10	22
Other	1,327	213	89	84	--	706	195	12	5	15	8
Data Not Reported	5,453	1,001	83	183	6	745	199	20	31	53	3,132

TABLE 4: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY AGE AND HEARING THRESHOLD LEVELS, ACCORDING TO PLACE OF EXAMINATION: UNITED STATES, 1969-70 SCHOOL YEAR.

Better Ear Averages in Decibels (ISO)[1] and Age	Place of Examination										
	All Places	Speech & Hearing Clinic	Hospital or University	Health Department	Audiologist's Office	School for Deaf	Other School	Hearing Aid Company	M.D.'s Private Office	Other	Data Not Reported
All Ages-All Hearing Levels	35,285	13,655	801	1,151	350	10,753	3,682	72	719	430	3,672
Under 45	3,205	1,231	97	128	43	139	1,110	11	205	42	199
45-64	3,583	1,849	145	152	49	564	483	14	80	77	170
65-84	6,587	2,886	164	237	90	2,085	607	18	112	76	312
85 and Above	12,980	4,590	188	362	80	5,908	902	20	101	145	684
Data Not Available	8,930	3,099	207	272	88	2,057	580	9	221	90	2,307
Under 3 Years-All Hearing Levels	336	238	19	--	2	15	19	--	6	1	36
Under 45	5	5	--	--	--	--	--	--	--	--	--
45-64	20	20	--	--	--	--	--	--	--	--	--
65-84	38	32	3	--	--	2	1	--	--	--	--
85 and Above	63	54	1	--	--	2	5	--	1	--	--
Data Not Available	210	127	15	--	2	11	13	--	5	1	36
3-5 Years-All Hearing Levels	6,042	3,429	239	124	91	882	309	6	105	90	767
Under 45	123	72	3	--	2	21	16	1	3	3	2
45-64	382	272	17	14	6	31	16	--	10	8	8
65-84	1,067	703	45	25	20	156	49	--	26	17	26
85 and Above	1,954	1,165	56	55	27	451	115	3	19	25	38
Data Not Available	2,516	1,217	118	30	36	223	113	2	47	37	693
6-9 Years-All Hearing Levels	8,324	3,539	168	355	86	1,976	996	11	205	125	863
Under 45	1,017	380	21	41	14	39	383	3	73	11	52
45-64	967	553	37	47	17	99	127	1	24	26	36
65-84	1,442	714	36	87	20	329	136	4	37	21	58
85 and Above	2,909	1,170	46	97	13	1,137	218	1	25	48	154
Data Not Available	1,989	722	28	83	22	372	132	2	46	19	563
10-13 Years-All Hearing Levels	10,881	3,718	202	410	104	3,571	1,372	36	217	143	1,108
Under 45	1,227	450	42	57	19	40	431	6	83	21	78
45-64	1,239	589	51	62	17	204	196	6	29	31	54
65-84	2,163	858	44	83	26	735	244	11	23	22	117
85 and Above	3,991	1,204	31	120	21	1,931	327	10	25	51	271
Data Not Available	2,261	617	34	88	21	661	174	3	57	18	588
14-17 Years-All Hearing Levels	7,595	2,208	145	219	39	3,259	798	17	157	58	695
Under 45	745	297	28	29	7	30	242	1	43	7	61
45-64	774	343	31	27	7	167	118	6	14	10	51
65-84	1,476	462	32	35	14	668	142	3	23	13	84
85 and Above	3,073	776	42	71	5	1,788	180	5	22	18	166
Data Not Available	1,527	330	12	57	6	606	116	2	55	10	333
18 Years & Over-All Hearing Levels	2,107	523	28	43	28	1,050	188	2	29	13	203
Under 45	88	27	3	1	1	9	38	--	3	--	6
45-64	201	72	9	2	2	63	26	1	3	2	21
65-84	401	117	4	7	10	195	35	--	3	3	27
85 and Above	990	221	12	19	14	599	57	1	9	3	55
Data Not Available	427	86	--	14	1	184	32	--	11	5	94

[1]Average hearing threshold in the better ear computed at 500, 1000, 2000 cycles per second.

TABLE 5: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY RECENCY OF AUDIOLOGICAL EXAMINATION, ACCORDING TO PROFESSION OF EXAMINER: UNITED STATES, 1969-70 SCHOOL YEAR.

Recency of Audiological Examination	Profession of Examiner										
	All Examiners	Audiol-ogist	Otol-ogist	Other M.D.	Audiome-trist	Nurse	Teacher	School Princi-pal	Speech Thera-pist	Other	Data Not Reported
Total	35,285	22,191	1,031	334	1,427	1,351	1,326	145	700	1,327	5,453
Under 1 Year	10,447	7,156	309	88	401	765	476	3	160	475	614
1 Year, Less Than 2 Years	9,535	6,770	307	65	357	352	294	79	266	447	598
2 Years, Less Than 3 Years	4,878	3,454	133	50	286	53	251	19	154	134	344
3 Years, Less Than 4 Years	2,433	1,617	80	32	117	25	84	9	63	159	247
4 Years, Less Than 5 Years	1,287	917	35	21	30	12	34	8	9	49	172
5 Years, Less Than 6 Years	614	387	17	19	19	10	25	7	4	19	107
6 Years, Less Than 7 Years	377	257	13	12	17	6	17	5	--	8	42
7 Years, Less Than 8 Years	199	147	4	2	6	1	10	2	2	6	19
8 Years, Less Than 9 Years	161	107	4	3	4	5	19	4	--	--	15
9 Years and Over	254	157	9	2	11	6	36	8	5	1	19
Data Not Reported	5,100	1,222	120	40	179	116	80	1	37	29	3,276

TABLE 6: NUMBER OF STUDENTS ENROLLED IN PARTICIPATING SPECIAL EDUCATIONAL PROGRAMS FOR THE HEARING IMPAIRED BY RECENCY OF AUDIOLOGICAL EXAMINATION, ACCORDING TO PLACE OF EXAMINATION: UNITED STATES, 1969-70 SCHOOL YEAR.

Recency of Audiological Examination	Place of Examination										
	All Places	Speech & Hearing Clinic	Hospital or University	Health Department	Audiologist's Office	School for Deaf	Other School	Hearing Aid Company	M.D.'s Private Office	Other	Data Not Reported
Total	35,285	13,655	801	1,151	350	10,753	3,682	72	719	430	3,672
Under 1 Year	10,447	4,690	202	485	151	2,598	1,775	34	239	139	134
1 Year, Less Than 2 Years	9,535	3,711	256	313	68	3,644	1,018	13	155	133	224
2 Years, Less Than 3 Years	4,878	2,040	175	180	55	1,885	331	5	87	55	65
3 Years, Less Than 4 Years	2,433	1,078	64	45	15	937	160	7	56	26	45
4 Years, Less Than 5 Years	1,287	588	21	45	22	479	77	2	29	14	10
5 Years, Less Than 6 Years	614	307	20	29	9	159	53	1	17	14	5
6 Years, Less Than 7 Years	377	213	9	21	5	79	24	2	15	7	2
7 Years, Less Than 8 Years	199	115	7	1	1	53	11	--	3	3	5
8 Years, Less Than 9 Years	161	81	3	2	1	50	16	--	2	1	5
9 Years and Over	254	125	4	5	5	83	19	--	5	5	3
Data Not Reported	5,100	707	40	25	18	786	198	8	111	33	3,174

APPENDICES

Appendix I – Description of the Annual Survey of Hearing Impaired Children and Youth

Appendix II – Basic Data Form Used in the Annual Survey for the 1969-70 School Year

Appendix III – Preschool Data Form Used in the Annual Survey for the 1969-70 School Year

Appendix IV – Programs Participating in the Annual Survey of Hearing Impaired Children and Youth

APPENDIX I

THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

BACKGROUND AND PURPOSE

The Annual Survey of Hearing Impaired Children and Youth began its activities in May 1968. The program is established as a permanent research organization to collect, process and disseminate data on hearing impaired individuals through college age in the United States. The need for such information on this universe has been of prime concern to educators, audiologists, legislators, psychologists and others.

Two preceding years of pilot and developmental work in a five state area determined its operational feasibility and crystalized its methodology. The Division of Research, Bureau of Education for the Handicapped, Office of Education, Department of Health, Education and Welfare initiated the Annual Survey and provides the major share of its funding. The program is conducted by the Office of Demographic Studies of Gallaudet College.

The long range goal of the Annual Survey is to collect data on the entire hearing impaired population through college age in the United States. For operational reasons the hearing impaired population has been divided into three groups:

GROUP A – Hearing impaired individuals who are receiving special educational services related to their hearing loss.

GROUP B – Individuals who have been diagnosed as being hearing impaired but who are not receiving any special educational services.

GROUP C – Individuals in the general population who, in fact, are hearing impaired but their hearing loss has not been diagnosed at a given point of time.

POLICIES AND PRINCIPLES

It is of paramount importance that participating institutions be assured that the data collected will be held in strictest confidence. Only staff members of the Office of Demographic Studies will have access to the records and then only for the purpose of preparing statistical summaries for analyses of the data. Individual student identification may be established by code numbers assigned and known only by the reporting institution. Each school will receive data on its own students, but no information permitting identification of any individual student or school will be published or made available for any purpose. Independent researchers will have access only to summary statistics and will not know the identity of the schools from which the data were compiled.

Of great importance is the fact that policies and direction of the Annual Survey are determined by a committee representing all areas of services to hearing impaired individuals. The committee is formally called the National Advisory Committee to the Annual Survey of Hearing Impaired Children and Youth. Its membership has broad width and depth in technical and executive expertise. In addition, a technical subcommittee composed of members of the Advisory Committee is called upon for advice and direction as special needs arise.

Suggestions and comments also come from discussions with teachers, audiologists, psychologists and other professionals who work directly with hearing impaired individuals. Also, aside from these direct contacts the staff members of the Annual Survey have with people in the field, periodic formal surveys of the cooperating educational programs are conducted to aid in determining the kinds of information needed in the field. To be effective, the program must assist these persons in solving problems with which they struggle day after day.

Since the Annual Survey attempts to promote the use of its data by those whose judgements and decisions will have a direct or indirect bearing on the education of hearing impaired individuals, it recognizes a responsibility to devote a part of its resources to the evaluation of the quality of the data collected and disseminated. This is particularly im-

portant because it seeks to establish national norms on the basic characteristics of hearing impaired children and youth that may be used by teachers, administrators and researchers. Thus, in the dissemination of information, the Annual Survey makes every effort to properly qualify the data and indicate any limitation associated with it.

Fourthly, the Annual Survey devotes part of its resources to developing the methodologies and instruments for best collecting data on a continuing basis for a national population of hearing impaired children and youth. The methodologies and instruments are of two basic kinds: (1) those associated with basic demographic variables that are collected on the total student population each year, and (2) those relating to the performance of the student in various areas, or to topics of special interest in a given year which may be collected on a sample basis.

DATA COLLECTION

1968-69 School Year

During the first year of the program, data collection activities were directed towards all schools for the deaf and a representative sample (15 percent) of all special classes. In addition, records on students who were receiving itinerant services were obtained in total from two states and in part from several states. In all 25,363 individual records were collected. This represented nearly 80 percent of the total enrollment of all institutions invited to participate.

Also during the first year, an academic Achievement Testing Program was conducted. Over 12,000 Stanford Achievement Tests were administered. The Annual Survey supplied testing materials and scoring services free of charge to participating programs. Achievement test scores for hearing impaired students based on the results of that testing program were published and distributed in the Fall of 1969. In addition, each participating school received distributions of achievement test scores based on the performance of their own students.

1969-70 School Year

The Annual Survey extended its coverage during the second year of data collection. Efforts were made to reach students in all of the special classes for the hearing impaired, as well as in all of the schools. Data were obtained on 35,285 students from 435 reporting sources.

1970-71 School Year

Approximately 600 reporting sources with about 42,000 students enrolled in their programs are cooperating with the Annual Survey for the 1970-71 school year. This represents an increase of 197 new participating educational programs with almost 8,000 students. At the same time, about 98 percent of those programs that participated last year have been retained in this year's Survey.

An Achievement Testing Program is being conducted again this year by the Annual Survey. Approximately 305 sources including roughly 22,000 students are involved in this program. The procedures being followed in the current program were influenced heavily by the results of the Achievement Testing Program conducted by the Annual Survey during the 1968-69 school-year. This influence is reflected especially in three areas of this year's program: (1) Students were given a screening test to determine the most appropriate battery they should receive. (2) The schools were supplied with practice materials for their students, to familiarize students with test format and procedures. (3) In cooperation with Harcourt Brace Jovanovich, Inc., the test publishers, special printings of the Primary levels were arranged in which written instructions were provided to supplement oral ones. A reliability study also is being conducted in conjunction with this year's Achievement Testing Program. This evaluation study will help to determine the reliability of an achievement test designed for hearing students when used by hearing impaired students. This study is also designed to shed some light on the validity of these tests.

PROGRAM SERVICES AND PUBLICATION OF THE DATA

The program is accumulating a large volume of statistical data. The processing and dissemination of these data hold wide implications and potential benefits for educational, audiological, medical, psychological, legislative and other services to the hearing impaired. Towards the goal of fully utilizing the data, the program will make data available to independent investigators for research purposes. Masters' theses, doctoral dissertations, institutional level research programs, private studies, etc., are solicited. Competent researchers are encouraged to propose detailed analyses of the data to further increase its usefulness. The Office of Demographic Studies will not permit the data to be used in a manner that is not scientific or objective in its approach. The Annual Survey plans to produce at

least six major publications per year not including those that may be prepared by independent researchers using data collected by this program.

The Survey Office also provides each participating school or program with tabulations of the characteristics of their own students. The participating programs may obtain a set of punch cards containing the information submitted on each of their students. Further, the Annual Survey Office is available to provide consultation services to particular schools or school systems that are concerned with gathering and processing data on their students.

Participation in the Survey has led many of the programs to examine their current forms and record keeping procedures. This led to requests that the Survey develop a uniform record form to keep student information for use in schools and classes throughout the country. Such a form was developed and used on a trial basis by a few schools during the 1970-71 school year. On the basis of this experience, the form was revised and will be distributed for use during the 1971-72 school year. Preliminary indications are that more than half of the educational programs in the United States are planning to use the form during the coming school year.

The initial success of the Annual Survey can be measured only in terms of the levels of participation and interest expressed by many individuals. The ultimate success will be measured not in terms of volume of data that will be collected and published, but in terms of its contributions to improving educational and other opportunities for hearing impaired children and youth. In this regard, it appears that progress is being made. For the first time a vast body of statistical information is becoming available for research and planning purposes.

APPENDIX II

OFFICE OF DEMOGRAPHIC STUDIES
GALLAUDET COLLEGE, WASHINGTON, D.C.

BASIC DATA FORM

ACHIC-2

ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN—1969-70 School Year

CONFIDENTIAL: All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source:

I. GENERAL INFORMATION

A. 1. Name of Student or Code Number _____ (Last) (First) (Middle) Date of Birth _____ (Mo., Day, Yr.) Sex ☐ M ☐ F

2. Residence _____ (City) (County) (State)

B. 1. Present School or Agency _____ (Name)

2. Location _____ (Number and Street) (City) (County) (State & ZIP Code)

II. EDUCATIONAL PROGRAM

A. 1. For students enrolled **fulltime** in a special class or school, check below:
☐ School for the Deaf ☐ Classes for Hearing Impaired
☐ School for Multiply Handicapped ☐ Classes for Multiply Handicapped

2. For students who do not attend a special school or class on a fulltime basis, enter type of program below:
Regular Classes _____ hours per week; **plus** itinerant services _____ hours per week.
Regular Classes _____ hours per week; **plus** other special educational services _____ hours per week.
Special Classes _____ hours per week
Other (specify type and hours per week): _____

B. 1. Type of school or agency: ☐ Public ☐ Private

2. Type of student: ☐ Residential ☐ Day

III. EDUCATIONAL HISTORY

A. Date first enrolled in **this** school: _____

B. Educational history since age six:

1. Total full years attended this school since age six: _____ (Do not include present school year)

2. Attendance at **other** schools since age six. (Do **not** include present school):
Mark all that apply. If none check here ☐

Regular Classes Only-	Regular Classes Plus Special Training-	Fulltime Classes for Hearing Impaired-	Schools for the Deaf-	Other-
_____ Years	_____ Years	_____ Years	_____ Years	_____ Years

C. Formal education prior to age six: If none check here ☐ If unknown check here ☐

1. Age started _____

2. Type (check all that apply):
☐ Preschool for Hearing ☐ Preschool for Hearing Impaired ☐ Preschool for Hearing Plus Special Training
☐ Preschool for Multiply Handicapped ☐ Parent-Child Program ☐ Other (specify) _____

IV. HISTORY OF HEARING LOSS

A. STUDENT HISTORY

1. Probable age at onset of hearing loss: ☐ At Birth _____ Years of Age

2. Age hearing loss discovered: _____ Years _____ Months

3. If onset of loss **at birth**, what was probable cause **(mark all that apply):** ☐ No Known Cause ☐ Data Not Available
☐ Maternal Rubella ☐ Trauma to Mother ☐ Prematurity ☐ Complications of Pregnancy ☐ Hereditary
☐ Trauma at Birth ☐ Medication During Pregnancy ☐ RH Incompatibility ☐ Other (specify) _____

4. If loss acquired **after birth**, what was probable cause **(mark all that apply):** ☐ No Known Cause ☐ Data Not Available
☐ Meningitis ☐ Mumps ☐ Measles ☐ Otitis-Media ☐ Trauma
☐ Other (specify): _____

5. Birth weight, if known: _____ lbs. _____ ozs.

B. FAMILY HISTORY

1. Mother (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.

2. Father (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.

3. Siblings **(indicate number in each category—If none, write "0"):**
Total number _____; Normal hearing before age 6 _____; Hearing loss before age 6 _____; ☐ Data not available

4. Does student have a twin: ☐ Yes ☐ No **(If yes, complete items 4(a) and 4(b) below):**
(a) Sex of twin: ☐ M ☐ F
(b) Is twin enrolled in this school: ☐ Yes ☐ No

5. Is there any familial history of deafness other than indicated above: ☐ Yes ☐ No

6. Are parents known to be related in any way? ☐ Yes ☐ No

V. AUDIOLOGICAL FINDINGS

A. ☐ Not Tested ☐ Unable To Test ☐ Tested, But Results Not Available

B. ☐ Tested **(Record Results Below):**

1. Standard used for testing: ☐ ISO ☐ ASA ☐ Free Field (Symbol ~)

2.

	RIGHT EAR								LEFT EAR							
Frequency	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
Air Conduction																
Bone Conduction																

C. UNAIDED SPEECH THRESHOLD

1. Test Used: ☐ SAT ☐ SRT ☐ Not Tested

2.

RIGHT EAR						LEFT EAR					
0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over

D. EXAMINER IDENTIFICATION

Name of clinic or place conducting audiological examination

_____ Date_____

Address _____
(Number and Street) (City) (State & ZIP Code)

Profession of Examiner: ☐ Audiologist ☐ Otologist ☐ Other M.D. ☐ Audiometrist ☐ Nurse ☐ Teacher

Other (specify) _____

VI. INTELLIGENCE TEST

Indicate results of most recent intelligence test

Description of Test		I.Q. Scores		
Name	Level	Verbal	Nonverbal	Date Tested (Month, Yr.)

VII. ADDITIONAL HANDICAPPING CONDITIONS

Check all educationally significant handicapping conditions: If none, check here ☐

☐ Epilepsy ☐ Severe Visual ☐ Emotional Problems ☐ Perceptual-Motor Disorders
☐ Cleft Lip or Palate ☐ Mental Retardation ☐ Behavioral Problems ☐ Cerebral Palsy
☐ Other (describe) _____

COMMENTS:

APPENDIX III

OFFICE OF DEMOGRAPHIC STUDIES, GALLAUDET COLLEGE, WASHINGTON, D.C. ACHIC-4

(This form is to be used for children who will become six years of age after December 31, 1969)

ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN — 1969-70 School Year

CONFIDENTIAL: All information which would permit identification of any individual or institution will be held strictly confidential and will be used only by persons engaged in the survey for preparing statistical summaries. The data will not be disclosed to others for any other purpose.

Name of Reporting Source:

I. GENERAL INFORMATION

A. 1. Name of Student or Code Number _____ (Last) (First) (Middle) Date of Birth _____ (Mo., Day, Yr.) Sex ☐ M ☐ F

2. Residence _____ (City) (County) (State)

B. 1. Present School or Agency _____ (Name)

2. Location _____ (Number and Street) (City) (County) (State & ZIP Code)

II. EDUCATIONAL PROGRAM

A. TYPE OF SCHOOL OR AGENCY

1. ☐ School for Hearing ☐ Residential School for Deaf ☐ School for Multiply Handicapped
   ☐ Classes for Hearing Impaired ☐ Day School for Deaf ☐ Speech and Hearing Clinic
   ☐ Other (specify): _____
2. Is School or Agency: ☐ Public ☐ Private
3. Type of Student: ☐ Residential ☐ Day

B. TYPE OF PROGRAM

1. Indicate number of hours per week the child is seen: _____ Hours Per Week
2. Is the child seen: ☐ Individually ☐ Group or ☐ Both
3. Total time child has been enrolled in this school or agency: _____ Years _____ Months
4. Parent Training:
   (a) Are parents enrolled in a special parent program: ☐ Yes ☐ No
   (b) Are parents participating in a correspondence course: ☐ Yes ☐ No

III. EDUCATIONAL HISTORY

A. Prior to the present program, has the child received other special educational training: ☐ Yes ☐ No

1. If YES, age started **first** program: _____ Years _____ Months
2. Type (specify): _____
3. Total time enrolled: _____ Years _____ Months

IV. HISTORY OF HEARING LOSS

A. STUDENT HISTORY

1. Probable age at onset of hearing loss: ☐ At Birth _____ Years of Age
2. Age hearing loss discovered: _____ Years _____ Months
3. If onset of loss **at birth**, what was probable cause **(mark all that apply)**: ☐ No Known Cause ☐ Data Not Available
   ☐ Maternal Rubella ☐ Trauma to Mother ☐ Prematurity ☐ Complications of Pregnancy ☐ Hereditary
   ☐ Trauma at Birth ☐ Medication During Pregnancy ☐ RH Incompatibility ☐ Other (specify) _____
4. If loss acquired **after birth**, what was probable cause **(mark all that apply)**: ☐ No Known Cause ☐ Data Not Available
   ☐ Meningitis ☐ Mumps ☐ Measles ☐ Otitis-Media ☐ Trauma
   ☐ Other (specify): _____
5. Birth weight, if known: _____ lbs. _____ ozs.

B. FAMILY HISTORY

1. Mother (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
2. Father (check one): ☐ Normal hearing before age 6; ☐ Hearing loss before age 6; ☐ Data not available.
3. Siblings **(indicate number in each category—If none, write "0")**:
   Total number _____; Normal hearing before age 6 _____; Hearing loss before age 6 _____; ☐ Data not available
4. Does student have a twin: ☐ Yes ☐ No **(If yes, complete items 4(a) and 4(b) below)**:
   (a) Sex of twin: ☐ M ☐ F
   (b) Is twin enrolled in this school: ☐ Yes ☐ No
5. Is there any familial history of deafness other than indicated above: ☐ Yes ☐ No
6. Are parents known to be related in any way? ☐ Yes ☐ No

V. AUDIOLOGICAL FINDINGS

A. ☐ Not Tested ☐ Unable To Test ☐ Tested, But Results Not Available

B. ☐ Tested **(Record Results Below):**

1. Standard used for testing: ☐ ISO ☐ ASA ☐ Free Field (Symbol ~)

2.

	RIGHT EAR								LEFT EAR							
Frequency	125	250	500	1000	2000	4000	6000	8000	125	250	500	1000	2000	4000	6000	8000
Air Conduction																
Bone Conduction																

C. UNAIDED SPEECH THRESHOLD

1. Test Used: ☐ SAT ☐ SRT ☐ Not Tested

2.

RIGHT EAR						LEFT EAR					
0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over	0-15dB	16-29dB	30-44dB	45-59dB	60-79dB	80dB & over

D. EXAMINER IDENTIFICATION

Name of clinic or place conducting audiological examination

_____ Date _____

Address _____
(Number and Street) (City) (State & ZIP Code)

Profession of Examiner: ☐ Audiologist ☐ Otologist ☐ Other M.D. ☐ Audiometrist ☐ Nurse ☐ Teacher

Other (specify) _____

VI. INTELLIGENCE TEST

Indicate results of most recent intelligence test

Description of Test		I.Q. Scores		
Name	Level	Verbal	Nonverbal	Date Tested (Month, Yr.)

VII. ADDITIONAL HANDICAPPING CONDITIONS

Check all educationally significant handicapping conditions: If none, check here ☐

☐ Epilepsy ☐ Severe Visual ☐ Emotional Problems ☐ Perceptual-Motor Disorders
☐ Cleft Lip or Palate ☐ Mental Retardation ☐ Behavioral Problems ☐ Cerebral Palsy
☐ Other (describe) _____

VIII. HEARING AID USE

A. Does Student Use a Personal Aid? ☐ Yes ☐ No
If YES, is aid: ☐ Monaural ☐ Binaural ☐ Y Cord

B. Speech Awareness Threshold With Aid is _____ dB.

C. Speech Reception Threshold With Aid is _____ dB.

COMMENTS:

APPENDIX IV

Participants in the Annual Survey of Hearing Impaired Children and Youth

ALABAMA

Alabama Institute for the Deaf & Blind
*Bessemer City Schools
Birmingham Public Schools
*Blossomwood Elementary School
*Children's Center of Montgomery, Inc.
*Etowah County Board of Education
*Franklin County Board of Education
*Holt Elementary School
*Huntsville Rehabilitation Center
*Lewis-Slossfield Speech & Hearing Center
*Mobile County Deaf Education Program
*Mobile Preschool for the Deaf, Inc.
*Tuscaloosa County Schools
*University of Montevallo Speech & Hearing Clinic

ALASKA

*Alaska Treatment Center for Crippled Children & Adults, Inc.
Anchorage Borough School District
*Bethel State School

ARIZONA

Arizona State School for the Deaf & Blind
*Emerson School
Samuel Gompers Memorial Rehabilitation Center, Inc.
*Phoenix Day School for the Deaf
Phoenix Elementary Oral Day Classes

ARKANSAS

Arkansas Speech & Hearing Center
Jenkins Memorial Children's Center

CALIFORNIA

Alhambra City School District
Alum Rock Union Elementary School District
Anaheim Union High School District
*Aurally Handicapped Classes of Solano County
Bellflower Unified School District
Mary E. Bennett School for the Deaf
Butte County Schools
*California School for the Blind, Deaf-Blind Department
California School for the Deaf, Berkeley
California School for the Deaf, Riverside
Cedarcreek School for the Deaf
Centinela Valley Union High School District
Centralia School District
Ceres Unified School District
*Chula Vista City School District
Covina Valley Unified School District
Cutler-Orosi Unified School District
*Downey Senior High School
*East San Gabriel Valley School for Multi-Handicapped Children
Escondido Union School District
Fremont Unified School District – Blacow Elementary
Fresno City Unified School District
*Garden Grove Unified School District
Goleta Union Elementary School District
Hayward City Unified School District
Chris Jespersen School
Kern County Schools
*La Mesa – Spring Valley School District
Lancaster Elementary School District
*Language, Hearing, & Speech Clinic, Fresno State College
Little Lake City Elementary School District
Livermore Valley Joint Unified School District
Lompoc Unified School District
Long Beach Unified School District
Marin County Schools
Marlton Elementary School
Montebello Unified School District
Monterey County Schools
Mt. Diablo Therapy Center
Mt. Diablo Unified School District
Napa Valley Unified School District
Norwalk-La Mirada Unified School District
Oakland City Unified School District
Orange Unified School District
*Orcutt Union Elementary School District

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

*Pajaro Valley Unified School District
*Palo Alto Unified School District
Pasadena City Unified School District
*Placer County Public Schools
Pomona Unified School District
Redondo Beach City Elementary School District
Richmond Unified School District
Riverside Unified School District
Sacramento City Unified School District
*San Bernardino County Schools
San Diego Unified School District
San Francisco Speech & Hearing Center
San Jose City Unified School District
San Juan Unified School District
San Mateo County Classes for the Deaf
San Mateo Union High School District
Santa Ana Unified School District
Santa Clara Unified School District
*Santa Cruz County Itinerant Program for the Hearing Impaired
Santa Rosa City School District
Shasta County Schools
Simi Valley Unified School District
*South Junior High School
Southwest School for the Deaf
Stockton Unified School District
Sunnyvale Elementary School District
Sutter County Schools – Lincrest School
*Tehama County Public Schools
Tulare County Schools
Tulare Union High School District
Union Elementary School District
Ventura Unified School District

COLORADO

*Aurora Public Schools
Children's Hospital, Denver
Colorado School for the Deaf & Blind
*Colorado Speech & Hearing Center, Denver
Colorado State College – Bishop Lehr Laboratory
Jefferson County Public Schools R-1
*John Evans School
*Meadow Elementary School
Pleasant View Elementary School
Poudre R-1 Services for Aurally Handicapped Children

CONNECTICUT

*American School for the Deaf
Capitol Region Education Council – Hearing Impaired Class
Class for Preschool Hearing Impaired Children, Hartford
Easter Seal Goodwill Industries Rehabilitation Center
*East Hartford Public Schools
Enfield Public Schools – Preschool Hearing Impaired Class
Fairfield Public Schools – Preschool Hearing Impaired Class
Green Acres School
Hamden-New Haven Cooperative Educational Center
*Kings Highway School
Magrath School
Monroe Preschool Hearing Impaired Program
Mystic Oral School for the Deaf
Reynolds Preschool Hearing Impaired Program
South School
West Haven Department of Special Education

DELAWARE

Margaret S. Sterck School for Hearing Impaired

DISTRICT OF COLUMBIA

*Capitol Region Model Secondary School for the Deaf
Department of Special Education
Kendall School for the Deaf
Speech and Hearing Center – Public Schools of the District of Columbia

FLORIDA

*Allie Yniestra School
Brevard County Public Schools
Dade County Day Classes for Deaf
*Easter Seal Rehabilitation Center, Fort Lauderdale
*Edge Elementary School
Florida School for the Deaf & Blind
Hillsborough County Public Schools
*Holly Hill Elementary School
*Jackson Memorial Hospital, Audiology – Speech Pathology
*Lee County Department of Special Education
*Leon County Program for Hearing Impaired Children
Robert McCord Oral School
Palm Beach County Schools
*Pinellas County Schools
Rock Lake Elementary School

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

*Speech and Hearing Center, Inc., Jacksonville
*Tampa Oral School for the Deaf

GEORGIA

*Atlanta Public Schools
Atlanta Speech School, Inc.
Cobb County Board of Education
The Davison School, Inc.
Lawton B. Evans School
Georgia School for the Deaf
*Houston Speech & Hearing School
Savannah Speech & Hearing Center
*Robert Shaw Center

HAWAII

Central Intermediate School
Diamond Head School for the Deaf
McKinley High School

IDAHO

Idaho School for the Deaf & Blind
Speech & Hearing Center – Idaho State University

ILLINOIS

Bartonville Grade School Deaf Program
Bell Elementary School
Bi-County Oral Deaf Program
Black Hawk Hearing Handicapped Program
Champaign Community Schools
Chicago Vocational High School
Decatur Public School District
Dixon State School
Elim Christian School for the Exceptional Child
Ericson School
*Nathaniel Greene School
*Harrison High School
Dr. Robert Henner Hearing & Speech Center
Illinois School for the Deaf
*The Institute for Hearing & Speech
Jamieson School
Maine Township Special Education Program
Marquette Elementary School
Thomas Metcalf School
*Morrill Elementary School
Niles Township Department of Special Education
*Northern Suburban Special Education District
Northwestern Illinois Association
Northwest Suburban Special Education Organization
Perry School
*Quincy Public Schools
Ray School
Reinberg School
*St. Joseph's Speech & Hearing Clinic
Scammon School
*Shields Elementary School
South Metropolitan Association for Low-Incidence Handicapped
Special Education District of Lake County
*Springfield Public Schools
Tazewell-Mason Counties Special Education Association
*James Ward Elementary School
West Suburban Association for the Hearing Handicapped
*Williamson County Special Education District

INDIANA

Ball State University
Central Avenue School
Deaf-Oral Nursery of the Rehabilitation Center, Evansville
East Chicago Day Class for the Deaf
*Floyd County Preschool Deaf Class
Glenwood Elementary School
*Hammond Public Schools
*Hearing & Speech Center of St. Joseph's County, Inc.
Indiana School for the Deaf
Indiana University Medical Center
Marion Community Schools
*Michigan City Area Schools
*Morrison-Mock School
Oral Deaf Classes & Hearing Conservation Program, South Bend
*Trade Winds Rehabilitation Center, Inc.

IOWA

Black Hawk-Buchanan County Board of Education
Cedar Rapids Community School
*Dubuque County Schools
Hope Haven School
Iowa School for the Deaf
Ottumwa Community School District
Smouse Opportunity School
Wilson School – Oral Deaf Department

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

KANSAS

Hays Regional Classroom for the Hard-of-Hearing
*Hoisington Unified School District #431
Institute of Logopedics, Inc.
Kansas School for the Deaf
Lawrence Unified School District 497 – Grant School
*Salina Public Schools
*Speech & Hearing Clinic, Kansas State University
*Topeka Public Schools
*Mark Twain Elementary School
University of Kansas Medical Center
Wichita Public Schools

KENTUCKY

Kentucky School for the Deaf
Knox Central High School
Lexington Deaf Oral School
Louisville Deaf Oral Institute
Louisville Public Schools
*West Kentucky Easter Seal Center for Crippled Children & Adults

LOUISIANA

Acadia Parish School Board
Delgado College
Jefferson Parish School Board
Lafayette Parish School Board
Louisiana School for the Deaf
Speech & Hearing Center of Southwest Louisiana, Inc.
State School for the Deaf – Southern Branch
Sunset Acres School

MAINE

Bangor Regional Speech & Hearing Center
Governor Baxter State School for the Deaf
Northeast Hearing & Speech Center, Inc.
Pine Tree Society

MARYLAND

William S. Baer School #301
Baltimore County Department of Special Education
*Board of Education of Harford County
Forest Park Senior High School
Gateway Preschool
Maryland School for the Deaf
Montgomery County Public Schools
*Pikesville Junior High School
*Prince George's County Public Schools
*Special Education Center, Hagerstown

MASSACHUSETTS

*Belmont Public Schools
Beverly School for the Deaf
Boston School for the Deaf
Peter Bulkeley School
Clarke School for the Deaf
*Communications Disorders Department, Franklin County Public Hospital
Day Class for Preschool Deaf, Lowell
Sarah Fuller Foundation
Habilitation Center for the Pre-School Hard-of-Hearing & Deaf Children, Canton
Haverhill Preschool Class for Deaf
*Horatio A. Kempton School
*Lawrence Primary Program for the Deaf
*Leominster Day Classes for the Hearing Impaired
*Horace Mann School for the Deaf
Mercer School
Myrtle Street School
Page School
Perkins School for Blind
*Reading Day Class for Deaf
*Willie Ross School for the Deaf
Thayer-Lindsley Parent Centered Nursery
Upsala Street School
Waltham Public Schools
Woburn Day Class Program
*Worcester County Hearing & Speech Center

MICHIGAN

*Allen Park Public Schools
*Brighton Public Schools
Howard D. Crull Intermediate School
*Delta-Schoolcraft Intermediate School District
Detroit Day School for Deaf
Douglas School
Durant-Tuuri-Mott School
*Eastern Michigan University Speech & Hearing Clinic
Handley School
Ida Public Schools
Thomas Jefferson School
*Kalamazoo Public Schools
Ann J. Kellogg School
*Lakeview Elementary School, Negaunee
Lakeview Public Schools
Lansing Public Schools

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

Lapeer State Home & Training School
John A. Lemmer School
Lutheran School for the Deaf
Marquette Elementary
*Michigan School for the Deaf
Michigan School for the Blind
*Michigan State University Speech & Hearing Clinic
Mott Foundation Children's Health Center
Oakland Schools
Preschool Physically Handicapped Program, Wyoming
Public School Program for Deaf & Hard-of-Hearing, Jackson
Redford Union Hard-of-Hearing Program
Riverside Elementary School
Shawnee Park Schools
*Speech Clinic of the University of Michigan Medical School
Tecumseh Public Schools
Traverse City Public Schools
Tri-County Preschool
Utica Schools
Warren Consolidated Schools
*Wayne Community School District

MINNESOTA

*Anoka-Hennepin School District #11
*Austin Public Schools
Duluth Public Schools
Lutheran High School
Minneapolis Public Schools
Minnesota School for the Deaf
St. Paul Area Program for Impaired Hearing
Technical Vocational Institute

MISSISSIPPI

*Mississippi School for the Deaf
*Tupelo Regional Rehabilitation Center

MISSOURI

*Central Institute for the Deaf
Delaware Elementary School
*Gallaudet School for the Deaf
Hearing & Speech Center, Kansas City
Humboldt School
Missouri School for the Deaf
*Neosho Public Schools
*North Kansas City Public Schools
St. Louis County Special School District for the Handicapped – Litzsinger School
St. Louis University Speech & Hearing Clinic
School District of Kansas City

MONTANA

Montana State School for the Deaf & Blind
University of Montana Speech & Hearing Clinic

NEBRASKA

Nebraska School for the Deaf
Omaha Hearing School for Children, Inc.
*Omaha Public Schools
Prescott Acoustically Handicapped Unit

NEVADA

Ruby Thomas Elementary School
*Washoe County School District

NEW HAMPSHIRE

Crotched Mountain School for the Deaf
*Easter Seal Rehabilitation Center of Greater Manchester
Portsmouth Rehabilitation Center

NEW JERSEY

*American Institute for Mental Studies
Avon School
Bruce Street School
Class for the Hard-of-Hearing, Kearny
Clifton Public Schools
*Cumberland County Public Schools
Douglas Nursery for Hearing Handicapped
Hackensack Program for the Deaf
Helmbold Education Center
Hunterdon Medical Center Nursery for Hearing Impaired Children
*Marie H. Katzenbach School for the Deaf
*The Midland School
Millburn Avenue School
Newark State College
*North Jersey Training School
*Speech & Hearing Center, Burlington County Memorial Hospital
Summit Speech School
Township Public Schools, Neptune
Woodbridge Public School System

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

NEW MEXICO

*Albuquerque Hearing & Speech Center
New Mexico School for the Deaf

NEW YORK

Albany Medical Center Hospital
Board of Cooperative Educational Services, Nassau
*Board of Cooperative Educational Services, Suffolk County II
*Board of Cooperative Educational Services, Suffolk County III
*Board of Cooperative Educational Services of Washington, Warren, & Hamilton Counties
*Buffalo Public Schools
Catholic Charities Day Classes for Deaf Children
Cerebral Palsy Preschool
Children's Hospital & Rehabilitation Center
*Demonstration Home Program, Rochester
*Dutchess County Board of Cooperative Educational Services
*Erie County Board of Cooperative Educational Services
Grasslands Hospital
*Alexander Hamilton School #31
*Hebrew Institute for the Deaf
Junior High 47-M School for Deaf
*Meadowbrook Hospital Speech & Hearing Clinic
*Mill Neck Manor Lutheran School for the Deaf
New York Institute for the Education of the Blind
New York School for the Deaf, White Plains
New York State School for the Deaf, Rome
*Queens College Speech & Hearing Center
*Rensselaer County Board of Cooperative Educational Services
Rochester School for the Deaf
*St. Francis de Sales School for the Deaf
St. Joseph's School for the Deaf
St. Mary's School for the Deaf
School for Language & Hearing Impaired Children – Public School 158
Suffolk School for Deaf Children
Union-Endicott Central School District

NORTH CAROLINA

Charlotte Speech & Hearing Center, Inc.
Duke University Medical Center
Eastern North Carolina School for the Deaf
*Mecklenburg School – Department of Special Education
The Governor Morehead School
North Carolina School for the Deaf
Path School, Inc.
*Wake County Preschool for the Hearing Impaired

NORTH DAKOTA

Longfellow School
*Minot State College Speech & Hearing Clinic
North Dakota School for the Deaf
University of North Dakota Speech & Hearing Clinic

OHIO

Akron Board of Education
*Alexander Graham Bell School, Columbus
Alexander Graham Bell School for the Deaf, Cleveland
Betty Jane Oral School
Canton Public Schools
Cincinnati Educational Center
*Clark County Hearing & Speech Center
*Cleveland Heights High School
*Elyria City Schools
Hearing & Speech Center of Columbus and Central Ohio
*Howard Day School for the Hearing Impaired
*L.B. Kean Elementary School
Kennedy School for the Deaf
Kent Public Schools
Kent State University
Litchfield Rehabilitation Center
*McKinley Elementary School
Mansfield City Schools
Millridge Center for Hearing Impaired
Ohio School for the Deaf
Program for Physically Handicapped, Toledo
*St. Rita's School for the Deaf
*Springfield City Schools
Trumbull County Hearing Society
Warren City Schools
*Youngstown Public Schools
Zanesville Classes for Deaf

OKLAHOMA

Community Speech & Hearing Center, Enid
Eastside School
The Junior League Program for Children with Hearing Losses
*Kerr Junior High School

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

Oklahoma City Public Schools
*Oklahoma School for the Deaf
University of Oklahoma Medical Center
*Washington School

OREGON

Hearing and Speech Center, Eugene
Oregon State School for the Deaf
Portland Center for Hearing & Speech, Inc.
Portland Public Schools
Tucker-Maxon Oral School
*Washington County Intermediate Education District

PENNSYLVANIA

Archbishop Ryan Memorial Institute for the Deaf
De Paul Institute
*Ebensburg State School and Hospital
*Elwyn Institute
Erie City School District
*Home of the Merciful Saviour for Crippled Children
Willis and Elizabeth Martin School
*Pennhurst State School and Hospital
Pennsylvania School for the Deaf
Pennsylvania State Oral School for the Deaf
*The Pittsburgh Hearing & Speech Society, Inc.
Western Pennsylvania School for the Deaf
Programs for Speech & Hearing Handicapped:
Adams County Schools
Allegheny County Schools
Armstrong County Schools
Beaver County Schools
Bedford County Schools
Berks County Schools
Blair County Schools
Bradford County Schools
Bucks County Schools
Butler County Schools
Cambria County Schools
Cameron County Schools
Carbon County Schools
Centre County Schools
Chester County Schools
Clarion County Schools
Clinton County Schools
Crawford County Schools
Cumberland County Schools
Dauphin County Schools
Delaware County Schools
Elk County Schools
Erie County Schools
Fayette County Schools
Franklin County Schools
Fulton County Schools
Greene County Schools
Huntingdon County Schools
Indiana County Schools
Juniata County Schools
Lackawanna County Schools
Lancaster County Schools
Lawrence County Schools
Lebanon County Schools
Luzerne County Schools
Lycoming County Schools
McKean County Schools
Mercer County Schools
Mifflin County Schools
Monroe County Schools
Montgomery County Schools
Montour County Schools
Northampton County Schools
Northumberland County Schools
Perry County Schools
Pike County Schools
Potter County Schools
Schuylkill County Schools
Snyder County Schools
Somerset County Schools
Sullivan County Schools
Susquehanna County Schools
Tioga County Schools
Venango County Schools
Warren County Schools
Washington County Schools
Westmoreland County Schools
York County Schools

RHODE ISLAND

*Preschool Language Class at Meeting Street School
*Rhode Island Hospital Hearing & Speech Center
Rhode Island School for the Deaf
*Windmill Hearing Therapy Program

SOUTH CAROLINA

Charleston County Schools
*Estes Elementary School
Florence County School District #3
*Hearing and Speech Center, Columbia
*Keowee Schools

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

*Parker House Education Center for Hearing Handicapped Children
Pate Elementary School
*Pee Dee Hearing & Speech Center
*Spartanburg Speech & Hearing Clinic
South Carolina School for the Deaf & Blind
United Speech & Hearing Services

SOUTH DAKOTA

South Dakota School for the Deaf

TENNESSEE

*Arlington State Hospital & School
*Clover Bottom Hospital & School
East Tennessee State University – Speech & Hearing Clinic
*Green Valley Hospital & School
Hamilton County Speech & Hearing Center
*Knox County Public Schools
Memphis City Schools
Memphis Parents' School for Deaf & Aphasic
Memphis Speech & Hearing Center
Metropolitan Schools of Nashville & Davidson County
Sunnyside School
Tennessee School for the Deaf
University of Tennessee – Preschool Deaf Program
Bill Wilkerson Hearing & Speech Center

TEXAS

*Abilene Public Schools – Day Class for the Deaf
Amarillo Regional Hearing & Speech Center
Austin Independent School District
Baylor Speech & Hearing Clinic
*Bi-County Deaf & Hard of Hearing School, Brownsville
*Bexar County School for the Deaf
P.F. Brown Elementary School
The Callier Hearing & Speech Center
Corpus Christi Independent School District
County-Wide Area Day School, El Paso
Dallas Independent School District
Dallas Society for Crippled Children
*Easter Seal Society for Crippled Children & Adults of Tarrant County, Inc.
*Farias Special Education School
Grayson County Crippled Children & Adult Center
*Harlandale Independent School District
Houston Independent School District
Houston School for Deaf Children
*Houston Speech & Hearing Center
Helen Keller Special Education School
*Midland Independent School District
Multi-County School for the Deaf
Pasadena Independent School District
*Port Arthur Independent School District
*Sunshine Cottage School for Deaf Children
Tarrant County Day School for Deaf
*Temple Memorial Treatment Center
Texas Christian University Speech & Hearing Clinic
Texas School for the Deaf
Waco Independent School District
Wichita Falls Independent School District

UTAH

Brigham Young University – Communicative Disorders Clinic
Utah Schools for the Deaf & Blind
Utah State University – Edith Bowen Laboratory School

VERMONT

Austine School for the Deaf

VIRGINIA

Arlington County Public Schools
Blue Ridge Speech & Hearing Center, Inc.
*Bristol Memorial Hospital Speech & Hearing Center
*Charlottesville Public Schools
*Chesterfield County Public Schools
Diagnostic, Adjustive & Corrective Center for Learning
Diagnostic Special Education School of Tidewater Rehabilitation Institute
St. Paul's Oral School
Virginia School for the Deaf & Blind
Virginia State School for the Deaf at Hampton

WASHINGTON

Bellingham School District #501
*Bellevue Public Schools
Bremerton School District 100-C
*Edmonds School District #15
Edna E. Davis School
*Kent Public Schools
*Northshore School District #417

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

*Seattle Community College, Classes for the Deaf
Seattle Public Schools
*Shoreline School District #412
University of Washington – Experimental Education Unit
Washington State School for Blind
Washington State School for the Deaf
*Washington State University Speech & Hearing Clinic
Yakima School District #7

WEST VIRGINIA

*Kanawha Hearing & Speech Center
West Virginia School for the Deaf & the Blind

WISCONSIN

Bartlett School
Berryville School
City District Public Schools, La Crosse
Cooper Day School for Deaf
Day School for Deaf, Wausau
Madison Public Schools
Milwaukee Hearing Society, Inc.
*Oshkosh Program for Hearing Impaired Children
*Pleasant Hill School
*St. John's School for the Deaf
School for the Deaf, Green Bay
E.H. Wadewitz School
*Washington School, Sheboygan
Wisconsin School for the Deaf

WYOMING

Wyoming School for the Deaf

***Programs that joined the Survey during the 1970-71 school year-Data from these programs are not included in this report.**

REPORTS FROM THE ANNUAL SURVEY OF HEARING IMPAIRED CHILDREN AND YOUTH

SERIES D

No. 1 Academic Achievement Test Performance of Hearing Impaired Students—United States: Spring 1969

No. 2 Item Analysis of Academic Achievement Tests Hearing Impaired Students—United States: Spring 1969

No. 3 Additional Handicapping Conditions, Age at Onset of Hearing Loss, and Other Characteristics of Hearing Impaired Students—United States: 1968-69

No. 4 Type and Size of Educational Programs Attended By Hearing Impaired Students—United States: 1968-69

No. 5 Summary of Selected Characteristics of Hearing Impaired Students — United States: 1969-70

No. 6 Audiological Examinations of Hearing Impaired Students — United States: 1969-70